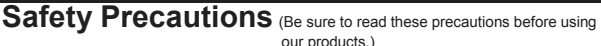


- Turn the power supply to the instrument off before wiring or checking. Working on or touching the terminal with the power switched on may result in severe injury or death due to electrical shock.
- Tighten the terminal screw using the specified torque. 0.3 N·m of torque is recommended.



The safety precautions are classified into 2 categories: "Warning" and "Caution".

 Warning: Procedures which may lead to dangerous conditions and cause death or serious injury, if not carried out properly.

 Caution: Procedures which may lead to dangerous conditions and cause superficial to medium injury or physical damage or may degrade or damage the product, if not carried out properly.

- To prevent an electric shock or fire, only Shinko or other qualified service personnel may handle the inner assembly.
- To prevent an electric shock, fire or damage to the instrument, parts replacement may only be undertaken by Shinko or other qualified service personnel.

- To ensure safe and correct use, thoroughly read and understand this manual before using this instrument.
- This instrument is intended to be used for industrial machinery, machine tools and measuring equipment. Verify correct usage after purpose-of-use consultation with our agency or main office. (Never use this instrument for medical purposes with which human lives are involved.)
- Excessive protective devices such as protective equipment against excessive temperature etc. may be installed, as malfunction of this product could result in serious damage to the system or injury to personnel. Proper periodic maintenance is also required.
- This instrument must be used under the conditions and environment described in this manual. Shinko Technos Co., Ltd. does not accept liability for any injury, loss of life or property resulting from the instrument being used under conditions not otherwise stated in this manual.

This instrument is intended to be used under the following environmental conditions (IEC61010-1): Overvoltage category II, Pollution degree 2
Ensure the mounting location corresponds to the following conditions:

- A minimum of dust, and an absence of corrosive gases
- No flammable, explosive gases
- No mechanical vibrations or shocks
- No exposure to direct sunlight, an ambient temperature of 0 to 50°C (32 to 122°F) (No icing)
- An ambient non-condensing humidity of 35 to 85 %RH

Power supply	100-240 V AC 50/60 Hz Allowable fluctuation range: 85 to 284 V AC 24 V A/C/D 50/60 Hz Allowable fluctuation range: 20 to 28 V A/C/D
Power consumption	100-240 V AC: Approx.8 W A (When max. options ordered: Approx. 10 VA) 24 V V AC: Approx.6 W A (When maximum options ordered: Approx. 9 VA) 24 V D C: Approx.4 W (When maximum options ordered: Approx. 7 W)
Ambient temperature	0 to 50°C (32 to 122°F)
Ambient humidity	35 to 85% RH (Non-condensing)
Indication accuracy	Thermocouple: Within $\pm 0.2\%$ of each input span ± 1 digit, However, R: S input, 0 to 200°C (32 to 392°F): Within $\pm 0.1^\circ\text{C}$ ($\pm 1^\circ\text{F}$) B input, 0 to 300°C (32 to 572°F): Accuracy is not guaranteed. K, J, E, T, N input, Less than 0°C (32°F): Within $\pm 0.4\%$ of input span ± 1 digit RTD: Within $\pm 0.1\%$ of each input span ± 1 digit, or within $\pm 1^\circ\text{C}$ (2°F) whichever is greater Direct current, DC voltage input: Within $\pm 0.2\%$ of input span ± 1 digit
Input sampling period	125 ms
Weight	Approx. 300 g
Accessories	Screw type mounting brackets: 1 set Instruction manual except: 1 copy Unit label: 1 label Terminal cover: 1 piece (when the TC option is ordered)
A1 output	Relay contact 1a: Control capacity: 3 A 250 V AC (resistive load)
A2 output	Electrical life: 100,000 cycles
A3 output	

Transmission output 1	Resolution:	12000
	Direct current:	4 to 20 mA DC (Load resistance: Max. 550 Ω)
	Response time:	400 ms+ Input sampling period (0%~90%)
Alarm output 4 (A4 option)	Relay contact 1a:	Control capacity: 3 A 250 V AC(resistive load) Electrical life: 100,000 cycles
Insulated power output (P24 option)	Output voltage:	24±3 V DC (when load current is 30 mA)
	Ripple voltage:	Within 200 mV DC (when load current is 30 mA)
	Max load current:	30 mA DC
Insulated power output (P5 option)	Output voltage:	5±3 V DC (when load current is 30 mA)
	Ripple voltage:	Within 200 mV DC (when load current is 30 mA)
	Max load current:	30 mA DC
Power for 2-wire transmitter (DSB option)	Output voltage:	24±3 V DC (when load current is 30 mA)
	Ripple voltage:	Within 200 mV DC (when load current is 30 mA)
	Max load current:	30 mA DC
Transmission output 2 (TC12 option)	Resolution:	12000
	Output accuracy:	Within ±0.3% of transmission output span
	Response time:	400 ms+ Input sampling period (0%~90%)
	Direct current:	4 to 20 mA DC (Load resistance: Max. 550 Ω) 0 to 20 mA DC (Load resistance: Max. 550 Ω) 0 to 1 V DC (Load resistance: Min. 100 kΩ) 0 to 5 V DC (Load resistance: Min. 500 kΩ) 1 to 5 V DC (Load resistance: Min. 500 kΩ) 0 to 10 V DC (Load resistance: Min. 1 MΩ)

The technical drawings show the JIR-06000 digital scale from two perspectives:

- Front View (Left):** Shows the LCD display with PV, SV, and TARE indicators, and buttons for FAST, MODE, and ON/OFF. Dimensions include a height of 48 mm, a main body width of 96 mm, and a total width of 106.2 mm.
- Side View (Right):** Shows the internal components, including the gasket and terminal cover. Dimensions include a mounting hole diameter of 11.5 mm, a distance between holes of 98.5 mm, a total length of 104.5(*) mm, and a terminal cover thickness of 2 mm.

(*) When terminal cover is used

⚠ Caution
As the case of the JIR-301-M is made of resin, do not use excessive force while tightening screws, or the mounting brackets or case could be damaged. 0.12 N•m of torque is recommended.

Mount the instrument vertically to the flat, rigid panel to ensure it adheres to the Drip-proof/Dust-proof specification (IP66).

If vertical close mounting is used for the instrument, IP66 specification (Drip-proof/Dust-proof) may be compromised, and all warranties will be invalidated. Mountable panel thickness: 1 to 8 mm

- (1) Insert the instrument from the front side of the control panel.
- (2) Attach the mounting brackets by the slots on the right and left sides of the case, and secure the instrument in place with the screws.

0.12 N·m of torque is recommended.

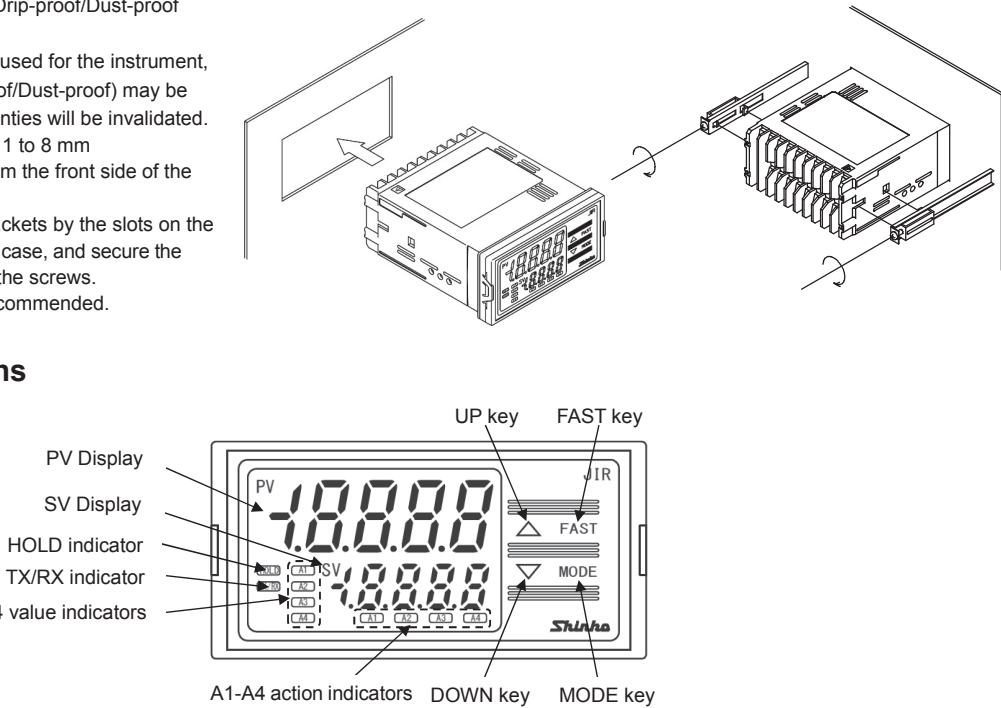


Diagram of the Shinko 3000-10000 display unit. The unit features a PV Display (top) and an SV Display (bottom), both showing '10.000'. It includes a HOLD indicator, TX/RX indicator, and A1-A4 value indicators. Control buttons include UP key, FAST key, DOWN key, and MODE key. The Shinko logo is visible at the bottom right.

Name	Description
PV Display	Indicates PV (process variable) or characters in the setting mode with the red LED.
SV Display	Indicates A1/A2/A3/A4 value or the set value in the setting mode with the green LED.
HOLD indicator	When PV is held (HOLD, Peak HOLD, Bottom HOLD), the yellow LED lights.
TX/RX indicator	The yellow LED lights during Serial communication (C5 option) TX (transmitting) output.
A1 value indicator	When A1 value is indicated on the SV Display, the green LED lights.
A2 value indicator	When A2 value is indicated on the SV Display, the green LED lights.
A3 value indicator	When A3 value is indicated on the SV Display, the green LED lights.
A4 value indicator	When A4 value is indicated on the SV Display, the green LED lights. (A4 option)
A1 action indicator	When A1 output is ON, the red LED lights. Flashes during A1 output HOLD.
A2 action indicator	When A2 output is ON, the red LED lights. Flashes during A2 output HOLD.
A3 action indicator	When A3 output is ON, the red LED lights. Flashes during A3 output HOLD.
A4 action indicator	When A4 output is ON, the red LED lights. Flashes during A4 output HOLD. (A4 option)

Key	
Name	Description
UP key	Increases the numeric value. If High/Low limit range alarm is selected in [A4 type], and if the SV Display indicates A4 value, the SV Display indicates A4 high limit value while the UP key is pressed.
FAST key	Makes the set value change faster while holding down the UP/DOWN key and FAST key together.
DOWN key	Decreases the numeric value.
MODE key	Selects the setting mode, and registers the set value.

- Turn the power supply to the instrument off before wiring or checking. Working on or touching the terminal with the power switched on may result in severe injury or death due to electrical shock.
- Tighten the terminal screw using the specified torque. 0.3 N·m of torque is recommended.

Terminal Code	Description
GND	Ground
PWR	Power supply voltage 100 to 240 V AC or 24 V AC/DC For a 24 V AC/DC power source, ensure polarity is correct when using direct current (DC).
TRANSMIT OUTPUT1	Transmission output 1
A1	A1 output
A2	A2 output
A3	A3 output
EVENT INPUT	Event input
TC	Thermocouple input
RTD	RTD input
DC	Direct current input, DC voltage input For direct current input (Externally mounted shunt resistor) connect a 50 Ω shunt resistor between input terminals.
P24	Insulated power output 24 V (P24 option)
P5	Insulated power output 5 V (P5 option)
RS-485	Serial communication (RS-485)(C5 option)
TRANSMIT OUTPUT2	Transmission output 2 (T□2 option)
A4	A4 output (A4 option)
A	Direct current input (DSB option)
24V	Power for 2-wire transmitter (DSB option)

Selection Item			
Set value lock			
----	Unlock	T	-200.0 to 400.0°C
Lock 1		N	-200 to 1300°C
Lock 2		PL-II	0 to 1390.0°C
Lock 3		C(W/Re5-26)	0 to 2315°C
Communication protocol		Pt100	-200.0 to 850.0°C
nonL	Shinko protocol	JPt100	-200.0 to 500.0°C
non dR	Modbus ASCII mode	Pt100	-200 to 850°C
non dR	Modbus RTU mode	JPt100	-200 to 500°C
nonL	Shinko protocol (Block read available)	E F F	K -320 to 2500°F
non dR	Modbus ASCII mode (Block read available)	E F F	K -200.0 to 750.0°F
non dR	Modbus RTU mode (Block read available)	J F F	J -320 to 1800°F
Communication speed		R F F	R 0 to 3200°F
124	2400 bps	S F F	S 0 to 3200°F
48	4800 bps	B F F	B 0 to 3300°F
96	9600 bps	E F F	E -320 to 1500°F
192	19200 bps	T F F	T -200.0 to 750.0°F
384	38400 bps	N F F	N -320 to 2300°F
Parity		PL-II	0 to 2500°F
nonE	No parity	C(W/Re5-26)	0 to 4200°F
E8En	Even	Pt100	-200.0 to 1000.0°F
odd	Odd	JPt100	-200.0 to 900.0°F
Stop bit		Pt100	-300 to 1500°F
1	1 bit	JPt100	-300 to 900°F
2	2 bits	4 to 20 mA DC	-2000 to 10000 (Externally mounted 50Ω shunt resistor)
Input type		0 to 20 mA DC	-2000 to 10000 (Externally mounted 50Ω shunt resistor)
E F C	K -200 to 1370°C	0 to 1 V DC	-2000 to 10000
E F C	K -200.0 to 400.0°C	0 to 5 V DC	-2000 to 10000
J F C	J -200 to 1000°C	1 to 5 V DC	-2000 to 10000
R F C	R 0 to 1760°C	0 to 10 V DC	-2000 to 10000
S F C	S 0 to 1760°C	4 to 20 mA DC	-2000 to 10000 (Built-in 50 Ω shunt resistor)
B F C	B 0 to 1820°C	0 to 20 mA DC	-2000 to 10000 (Built-in 50 Ω shunt resistor)
E F C	E -200 to 800°C	Decimal point place	
		00	No decimal point
		000	1 digit after decimal point
		0000	2 digits after decimal point
		A1/A2/A3/A4 type	
		----	No alarm action
		HL	High limit alarm
		LL	Low limit alarm
		HLL	High limit with standby alarm
		LLL	Low limit with standby alarm
		HLLL	H/L limit range alarm(A3, A4 only)
		A1/A2/A3/A4 Energized/De-energized	
		nonL	Energized
		rEHS	De-energized
		Event input function	
		HoLd	HOLD
		P _ H	Peak HOLD
		b _ H	Bottom HOLD
		HL d 1	Alarm HOLD 1
		HL d 2	Alarm HOLD 2
		A1/A2/A3/A4 HOLD function	
		nonE	Disabled
		HoLd	Enabled
		Square root function	
		nonE	Disabled
		UrE	Enabled
		A1/A2/A3/A4 output ON/OFF	
		oFF	Output OFF
		on	Output ON

Power ON

PV/SV Display Mode

- PV A1 value is displayed.
- PV A2 value is displayed.
- PV A3 value is displayed.
- PV A4 value is displayed.

[About setting item]

- Upper left: PV Display: Indicates the setting item characters.
- Lower left: SV Display: Indicates the factory default. Right side: Setting item
- : : Available only when option is ordered.

* If Serial communication (RS-485)[C5 option] is ordered, [Event input function] will not be available.

[About key operation]

- Δ + MODE: Press the Δ and MODE key (in that order) together. The unit will move to the next setting item, illustrated by an arrow.
- MODE: Press the MODE key. The unit will move to Alarm setting mode.
- ∇ + MODE (3 sec): Press the ∇ and MODE key (in that order) together for approx. 3 seconds. The unit will move to Auxiliary function setting mode 1.
- Δ + ∇ + MODE (3 sec): Press the Δ , ∇ and MODE keys (in that order) together for approx. 3 seconds. The unit will move to Auxiliary function setting mode 2.
- Δ + FAST (5 sec): Press the Δ and FAST keys (in that order) together for approx. 5 seconds. The unit will move to Maintenance mode.

Alarm setting mode

- A1 value
- A2 value
- A3 value
- A4 value
- A4 high limit value

Returns to PV/SV Display Mode.

Auxiliary function setting mode 1

- Set value lock
- Sensor correction coefficient
- Sensor correction
- Communication protocol
- Instrument number
- Communication speed
- Parity
- Stop bit

Returns to PV/SV Display Mode.

Auxiliary function setting mode 2

- Input type
- Scaling high limit
- Scaling low limit
- Decimal point place
- PV filter time constant
- A1 type
- A2 type
- A3 type
- A4 type
- A1 Energized/De-energized
- A2 Energized/De-energized
- A3 Energized/De-energized
- A4 Energized/De-energized
- A1 hysteresis
- A2 hysteresis
- A3 hysteresis
- A4 hysteresis
- A1 delay time
- A2 delay time
- A3 delay time
- A4 delay time
- Transmission output 1 high limit
- Transmission output 1 low limit
- Transmission output 2 high limit
- Transmission output 2 low limit
- Event input function
- A1 HOLD function

Maintenance mode

- A1 output ON/OFF
- A2 output ON/OFF
- A3 output ON/OFF
- A4 output ON/OFF
- Trans. output 1 manual output
- Trans. output 2 manual output

Returns to PV/SV Display Mode.

Abbreviations:

Trans.: Transmission

Transitions:

- From PV/SV Display Mode to Alarm setting mode: MODE
- From Alarm setting mode to Auxiliary function setting mode 1: ∇ + MODE (3 sec)
- From Auxiliary function setting mode 1 to Auxiliary function setting mode 2: Δ + ∇ + MODE (3 sec)
- From Auxiliary function setting mode 2 to Maintenance mode: Δ + FAST (5 sec)
- From Maintenance mode to PV/SV Display Mode: MODE
- From Alarm setting mode to PV/SV Display Mode: MODE
- From Auxiliary function setting mode 1 to PV/SV Display Mode: MODE
- From Auxiliary function setting mode 2 to PV/SV Display Mode: MODE
- From Maintenance mode to PV/SV Display Mode: MODE